MSDS No.: L312

MODD IVO.	2312									
I. Basic In	formation:	1.70.20						777		
Manufacturer: RADIATOR SPECIALTY COMPANY					NFPA Fre					
Address: 600 RADIATOR ROAD										
City, ST Zip: INDIAN TRAIL, NC 28079						Hez	alth 3	Reastivity O		
Emergency Contact: Rocky Mountain Poision Control Center										
Emergency Telephone Number: 303-623-5716										
Contact: Robert Geer										
Information Telephone Number: 704-688-3430										
Last Update: 05/01/2003 0 Filemost-vity										
Chemical State: X Liquid Gas Solid						Reactivi	ly .			
Chemical Type: Pure X Mixture										
•	ديي ـــــ									
II. Ingredi	ients:	À							inger Texter - 1986	
Trade Secret										
_		ĺ	EḤS	IAŖ	С	SARA				
CAS No.	Chemical Name	% Range	NT.	Р	SUB Z	313	OSHA PEL	ACGIH TLV	Other Limits	
124389	Carbon dioxide	1-5					N/AV	5000 ppm		
64742525	Naphthenic Petroleum Distillate	20-30					5 mg/m3	5 mg/m3		
127184	Tetrachloroethylene	60.0-100.0	Х	Х		х	25 ppm	25 ppm		
III. Hazar	rdous Identification:	**************************************								
Hazard Categ	gory:	<u> </u>	***************************************							
X Acute X Chronic		Fi	ire		[2	(Pres	ssure		Reactive	
Hazardous Identification Information: Danger: Harmful or fatal if swallowed. Eye and skin irritant. Vapor Harmful, Contents under pressure.										
Level 1 Aerosol										
IV. First /	Aid Measures:	14. 14.			78.6					
Route(s) of E	Entry:									
	n, Inhalation, and Ingestion.									
	ds (Acute and Chronic):									
Excessive ingestion may cause stomach irritation, nausea, vomiting. May complicate existing liver and kidney disease.										

Signs and Symptoms:

Eye Contace: Irritant. Prolonged contact may cause conjunctivitis. Skin Contact: Irritant. Defatting of tissue, dermatitis may occur.

Inhalation: Irritant to mucous membranes. Repeated exposure may cause narcosis..

Ingestion: HARMFUL OR FATAL IF SWALLOWED. May cause burns to mouth, throat & stomach.

Medical Conditions Generally Aggravated by Exposure:

Prolonged exposure above the OSHA permissible exposure limit may complicate existing liver and kidney diseases.

Emergency and First Aid Procedures:

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Eye Contact: Flush eyes with clean water for 15 minutes while lifting eyelids. Get prompt medical attention.

Skin Contact: Wash with soap and water thoroughly. If adverse effects persist, get prompt medical attention. Launder contaminated clothing before reuse.

Inhalation: Remove to fresh air. If breathing becomes difficult get prompt medical attention.

Ingestion: DO NOT INDUCE VOMITING! Call Poison Control Center, physician, or hospital emergency room immediately.

Other Health Warnings:

Aspiration of vomitus into the lungs can cause pneumonitis, which can be fatal.

V. Fire Fighting Measures:

Flash Point: N/A Lower Explosive Limit: N/A Upper Explosive Limit: N/A

F.P. Method: N/A

Fire Extinguishing Media: Water Fog, Foam, Carbon Dioxide, Dry Chemical

Special Fire Fighting Procedures:

Wear self-contained positive pressure breathing apparatus and protective clothes. Cool containers with a water fog. Do not use forced water stream as this could cause the fire to spread. Use shield to protect from rupturing and venting containers.

Unusual Fire and Explosion:

Contents under pressure. At elevated temperatures, container may vent, rupture, or burst violently. Vapors of this product may present a future health hazard in poorly ventilated areas. May liberate corrosive hydrochloric acid or toxic phosgene fumes.

VI. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc). Shovel up and place contaminated material into an approved chemical waste container. Where possible, vacuum spilled liquid using an explosion proof vacuum to recover material. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occured.

VII. Handling and Storage:

Precautions to be Taken:

Use with adequate ventilation and proper protective equipment.

Do not use or store near fire, sparks, or open flame. Do not puncture or incinerate container. Exposure to temperatures above 120° may cause container to vent, rupture, or burst.

Other Precautions:

Vapors are heavier that air and will collect in low areas. This material or its vapors when in contact with flames, hot glowing surfaces or electric arcs can decompose to form hydrogen chloride gas and possible traces of phosgene. Avoid contamination with water supplies. Keep away from foods.

VIII. Exposure Controls/Personal Protection:

Ventilation Requirements:

See Section 2 for applicable exposure limits. Maintain adequate ventilation.

Avoid breathing vapors. In restricted areas, use approved chemical filters designed to remove vapor. In confined areas, use approved air line type respirator or hood. A self-contained breathing apparatus is required for vapor concentrations above TLV limits.

Personal Protective Equipment:

See Section 2 for applicable exposure limits. For prolonged exposure wear protective safety glasses, gloves, and apron.

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IX. Physical and Chemical Properties:

Boiling Point: 248°F Melting Point: N/A

Evaporation Rate (Butyl Acetate = 1): 0.95 Vapor Pressure (mm Hg.): Not Det.

Specific Gravity (H20 = 1): 1.34000 **Vapor Density (AIR = 1):** 5.83

Solubility In Water: Insoluble Appearance and Odor: Opaque dense yellow suspension with sweet odor

Other Information: VOC Content: 0%

X. Stability and Reactivity:

Stability:

Stable

Incompatibility (Materials to Avoid):

Avoid contact with metals such as aluminum powders, magnesium powders, potassium, sodium, and zinc powder. Avoid open flames and hot glowing surfaces. Liquid oxygen and strong oxidants can form explosive mixtures of perchloroethylene..

Decomposition/By Products:

In the presence of water: hydrochloric acid. Ignition sources and hot metals surfaces: phosgene and chlorine. Flames, welding, and high temperatures induce decomposition.

Hazardous Polymerization:

Will not occur

XI. Toxicological Information:

ACUTE INHALATION LC50: (rats) 5040 ppm for 8 hours. Moderately toxic. ACUTE DERMAL LD50: (rabbit) > 3228 mg/kg. Slight to very low toxicity

SKIN IRRITATION: Mildly irritating. EYE IRRITATION: Mildly irritating.

ACUTE ORAL LD50: (rats) 2629 mg/kg. Moderalely toxic.

This product is listed under IARC as a 2A

XII. Ecological Information:

Toxic to aquatic life.

XIII. Disposal Considerations:

DISPOSAL: This container may be recycled in aerosol recycling centers when empty. Before offering for recycling, empty the can by using the product according to the label. DO NOT PUNCTURE! If recycling is not available, wrap the container and discard in the trash. Dispose of unused product in accordance with all local, state government and federal laws and regulations.

XIV. Transport Information:

DOT Hazard Class: ORM-D

Shipping Name: Consumer Commodity

XV. Regulatory Information:

USA TSCA: All chemicals used are listed on the TSCA Inventory.

CERCLA RQ: 1000 lbs

SARA 302: Not listed as a Extremely Hazardous Substance

SARA 311/312 HAZARD CLASS: Acute, Chronic

SARA 313 REPORTABLE: See Section 2 for SARA Reportable Chemicals.

PROPOSITION 65 WARNING: This product product contains a chemical known to the State of California to cause cancer.

NEW JERSEY RIGHT-TO-KNOW: Tetrachloroethylene

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XVI. Other Information:

Do not used in confined area without proper ventilation. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!

While Radiator Specialty Company believes this data is accurate as of the revision date, we make no warranty with respect to the data and we expressly disclaim all liability for reliance thereon. The data is offered soley for information, investigation, and verification. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this MSDS. The user is repsonsible for full compliance.